

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicants:** Kane *et al.*

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**Examiner:** Lin, Kenny S.

**Title:** SYSTEM AND METHOD FOR  
ROUTING DATA BY A SERVER

**Docket No.:** END920020006US1  
(IBME-0040)

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REVISED BRIEF OF APPELLANTS**

This is an appeal from the Final Rejection dated September 1, 2006, rejecting claims 1-

21. This Brief is accompanied by the requisite fee set forth in 37 C.F.R. 1.17 (c).

**REAL PARTY IN INTEREST**

International Business Machines Corporation is the real party in interest.

**RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

## **STATUS OF CLAIMS**

As filed, this case included claims 1-21. Claims 1-21 remain pending. Claims 1-21 stand rejected and form the basis of this appeal.

## **STATUS OF AMENDMENTS**

A request for reconsideration was submitted in response to the After Final Rejection filed by the Office on September 1, 2006; however, no amendment was made to the claims.

## **SUMMARY OF THE CLAIMED SUBJECT MATTER**

The present invention provides a method and system for routing data by a server. Specifically, the present invention provides a table-drive method and system for allowing parties to send and receive data in their own data formats and transfer protocols. In routing data from a source to a destination, the present invention does not require transformation of the data to an intermediate format and/or protocol before transformation into the format and protocol of the destination.

Claim 1 claims a method for routing data by a server, comprising the steps of: providing an application on the server (see e.g., page 10, lines 7-15; Fig. 1, item 22); providing a table of formats and protocols on the server (see e.g., page 10, line 20 through page 11, line 22; Fig. 3, item 60), wherein the table is accessible by the application (see e.g., page 10 line 16, through page 11, line 22; Fig. 2, items 38 and 40), wherein the table contains a plurality of formats and protocols (see e.g., page 11, lines 20-22; Fig. 3, items 20-22); receiving, on the server, data to be routed from a source to a destination (see e.g., page 12, lines 1-16; Fig. 4, item 104), the data having the destination and a transaction type that defines a character of the data included therein

(see e.g., page 12, lines 1-16; Fig.3, items 66 and 68); retrieving, from the table, a format of the plurality of formats for transforming the data and a protocol of the plurality of protocols for communicating the data based on the destination, the transaction type and the source (see e.g., page 3-16; Fig. 4, item 106); and the application transforming the data into the retrieved format (see e.g., page 12, line 17 through page 13, line 4; Fig. 4 item 108), and routing the transformed data to the destination using the retrieved communication protocol (see e.g., page 13 lines 5-14; Fig. 4, item 110), wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats (see e.g., page 13 lines 15-22; page 14, lines 9-14; Fig. 3, items 62A-C).

Claim 7 claims a method for routing data by a server, comprising the steps of: providing a communication application on the server (see e.g., page 10, lines 7-15; Fig. 1, item 22); entering a table of formats, protocols, sources, destinations and transaction types on the server (see e.g., page 10, line 20 through page 11, line 22; Fig. 3, item 60), wherein the table is accessible by the application (see e.g., page 10 line 16, through page 11, line 22; Fig. 2, items 38 and 40), wherein the table contains a plurality of formats and protocols e.g., page 11, lines 20-22; Fig. 3, items 20-22); receiving, on the server, data to be routed from an identified source to a destination (see e.g., page 12, lines 1-16; Fig. 4, item 104), the data having the destination and a transaction type that defines a character of the data included therein (see e.g., page 12, lines 1-16; Fig.3, items 66 and 68); detecting errors in the data based upon omissions in the data (see e.g., page 14, line 15 through page 15, line 6; Fig. 2, item 54); retrieving from the table a format of the plurality of formats for transforming the data and a protocol of the plurality of protocols for communicating the data, based on the destination, the transaction type and the source (see e.g., page 3-16; Fig. 4, item 106); and the application transforming the data into the retrieved format

(see e.g., page 12, line 17 through page 13, line 4; Fig. 4 item 108), and routing the transformed data from the server to the destination using the retrieved communication protocol (see e.g., page 13 lines 5-14; Fig. 4, item 110), wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats see e.g., page 13 lines 15-22; page 14, lines 9-14; Fig. 3, items 62A-C).

Claim 10 claims a system for routing data by a server, comprising: a table system for providing a table having a plurality of formats and protocols (see e.g., page 10, line 20 through page 11, line 22; Fig. 2, item 38; Fig. 3, item 60); a data reception system for receiving data from a source to be routed to a destination (see e.g., page 12, lines 1-16; Fig. 2, item 42), the data having a destination and a transaction type that defines a character of the data included therein (see e.g., page 12, lines 1-16; Fig. 3, items 66 and 68); a retrieval system for retrieving a format of the plurality of formats for transforming the data and a protocol of the plurality of protocols for communicating the protocol from the table based upon the source, the destination and the transaction type (see e.g., page 3-16; Fig. 2, item 44); a transformation system for transforming the data into the retrieved format (see e.g., page 12, line 17 through page 13, line 4; Fig. 2 item 46); and a routing system for routing the transformed data to the destination using the retrieved protocol (see e.g., page 13 lines 5-14; Fig. 2, item 50), wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats (see e.g., page 13 lines 15-22; page 14, lines 9-14; Fig. 3, items 62A-C).

Claim 16 claims a program product stored on a recordable medium for routing data by a server, which when executed, comprises: program code for providing a table having a plurality of formats and protocols (see e.g., page 10, line 20 through page 11, line 22; Fig. 3, item 60);

program code for receiving data from a source to be routed to a destination (see e.g., page 12, lines 1-16; Fig. 4, item 104), the data having a destination and a transaction type that defines a character of the data included therein (see e.g., page 12, lines 1-16; Fig.3, items 66 and 68); program code for retrieving a format of the plurality of formats for transforming the data and a protocol of the plurality of formats for communicating the protocol from the table based upon the source, the destination and the transaction type (see e.g., page 3-16; Fig. 4, item 106); program code for transforming the data into the retrieved format (see e.g., page 12, line 17 through page 13, line 4; Fig. 4 item 108); and program code for routing the transformed data to the destination using the retrieved protocol (see e.g., page 13 lines 5-14; Fig. 4, item 110), wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats (see e.g., page 13 lines 15-22; page 14, lines 9-14; Fig. 3, items 62A-C).

#### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1, 3, 10, 12, 16 and 18 stand rejected under 35 U.S.C. §102(e) as being anticipated by Endo (U.S. Patent Pub. No. 2004/0212841), hereafter “Endo.”
2. Claims 4, 7, 13 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Endo in view of Olejar *et al.* (U.S. Patent Pub. No. 2003/0037100), hereafter “Olejar.”
3. Claims 2, 11 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Endo in view of Deng (U.S. Patent No. 6,243,394), hereafter “Deng.”
4. Claims 5, 14 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Endo in view of Lakshman *et al.* (U.S. Patent No. 6,078,564), hereafter “Lakshman.”
5. Claims 6, 15 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Endo

in view of Harris, Jr. *et al* (U.S. Patent No. 6,144,975), hereafter "Harris."

6. Claim 8 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Endo and Olejar and further in view of Lakshman.
7. Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Endo, Olejar and Lakshman and further in view of Harris.

## ARGUMENT

### 1. REJECTION OF CLAIMS 1, 3, 10, 12, 16 AND 18 UNDER 35 U.S.C. §102(e) OVER ENDO

Appellants respectfully submit that the rejection of claims 1, 3, 10, 12, 16 and 18 under 35 U.S.C. 102(e) over Endo is defective.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); see MPEP '2131, p. 2100-69. Because each and every element of claims 1, 3-5, 11, 12, 15, 17, 19, 21, 23, 25, 26 and 30 is not found in Endo, Appellants respectfully request overrule of the rejection under 35 U.S.C. 102(e).

In the above referenced Final Office Action, the Examiner alleges that Endo teaches receiving, on the server, data to be routed from a source to a destination, the data having the destination and a transaction type that defines a character of the data included therein. The Office equates the transaction type of the claimed invention with the transmission methods such as email, ftp, fax of Endo. Office Action, page 4, citing Endo, FIGS. 4-8; pp. 0055-0056, 0060-0065. To this extent, the transmission methods of Endo indicate the manner in which the document data is to be transmitted and not the does not define the character of the data itself.

This distinction is further borne out in the language of the claims in which *format* of the data is claimed separately from the transaction type that defines the *character* of the data. To this extent, Endo teaches no identification of the character of the data that is separate from its format.

In contrast, the claimed invention includes "...receiving, on the server, data to be routed from a source to a destination, the data having the destination and a transaction type that defines a character of the data included therein." Claim 1. As such, unlike the transmission methods of Endo, which indicate the manner in which the document data is to be transmitted, the transaction type that is included in the data of the claimed invention defines the character of the data. This transaction type is distinct from the format of the transaction as evidenced by the claiming of each as a distinct feature. For example, referring to Fig. 3 of the claimed invention the transaction type may distinguish between invoices and orders while the format distinguishes between formats X, Y and Z. Thus, the transaction type as included in the claimed invention is not taught by the transmission methods of Endo, which are merely formats.

In the above referenced Final Office Action, the Examiner further alleges that Endo teaches that the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats. The Office cites a passage of Endo that it asserts teaches this feature. This passage describes the function of a document transmission controller, which "designates the document input source (the scanner 210 or the HD drive 205) of document data." Pp. 0065, citing FIG. 3. To this extent, Endo teaches that its document data may be from one or two document sources. This passage, however, does not teach that document data may be in different formats, depending of the source. The passage cited by the Office goes on to teach that "...the document transmission controller 302 provides a data transmission format to the format converter 308 in accordance

with the classified destination list.” Pp. 0065, citing FIG. 3. To this extent, the format that the document transmission controller of Endo provides is the format for the destination and not for the source. A format converter of Endo then converts the input document data to data in the designated data transmission format. Pp. 0065, citing FIG. 3.

The Examiner argues, in the Response to Arguments section of its Final Office Action, that “since different scanner or similar device may scan and save the data in various format, the input document need not necessary be of the same format.” Page 12. However, Endo does not explicitly teach that it may be used to convert input having various input formats or that it contains any mechanism for dealing with a plurality of input formats. To this extent, Applicants submit that the Examiner’s factual statement is unsubstantiated and amounts to Official Notice. Accordingly, Appellants respectfully submit that the Office is required to provide references that teach this feature.

The Examiner also argues, in its Response to Arguments, “...that the features upon which applicant relies (i.e., that document data may be in different formats, depending on the source) are not recited in the rejected claims(s).” Page 12. Applicants respectfully disagree and submit that the language “...the data which is received in one of a plurality of formats...” specifically recites that the data may be received in one of a plurality of formats. To this extent, the language of the claims explicitly sets forth the feature that Appellants argue is not taught by Endo, that is, the ability to convert from many formats to many formats.

To this extent, the conversion of Endo that is from a single format (i.e., that of a scanned document retrieved directly from the scanner or from a saved scan) to a number of formats does not accomplish the many to many conversion of the claimed invention. This is because Endo does not teach that the input document data may be in one of a plurality formats. Instead, the



input document data of Endo is always in the same format, i.e. inputted from a scanner or the like. Abstract.

The claimed invention, in contrast, includes "...wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats." Claim 1. To this extent, the application of the claimed invention does not merely convert input document data in a single predetermined format to a designated data transmission format as does the format converter of Endo, but is also adapted to transform data which is received in one of a plurality of received formats. For the above reasons, the format converter of Endo does not teach the application of the claimed invention.

## **2. REJECTION OF CLAIMS 4, 7, 13 AND 19 UNDER 35 U.S.C. §103(a) OVER ENDO IN VIEW OF OLEJAR**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Appellants respectfully submit that the Endo, Olejar and other references, taken alone or in combination, fail to meet each of the three basic criteria required to establish a *prima facie* case of obviousness. As such, the rejection under 35 U.S.C. §103(a) is defective.

Appellants respectfully disagree with the Office's assertion that the combined features of the cited art teach or suggest each and every feature of the claimed invention. For example, with respect to independent claim 7, as argued above with respect to independent claims 1, 10 and 16, Endo fails to teach or suggest receiving, on the server, data to be routed from a source to a

destination, the data having the destination and a transaction type that defines a character of the data included therein. Furthermore, with respect to independent claim 7, as argued above with respect to independent claims 1, 10, and 16, Endo fails to teach or suggest that the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats. Olejar does not cure these deficiencies.

**3. REJECTION OF CLAIMS 2, 7 AND 17 UNDER 35 U.S.C. §103(a) OVER ENDO IN VIEW OF DENG**

Appellants initially incorporate the above enumerated arguments. Additionally, in Appellants submit that Deng does not cure the deficiencies in Endo.

**4. REJECTION OF CLAIMS 5, 14 AND 20 UNDER 35 U.S.C. §103(a) OVER ENDO IN VIEW OF LAKSHMAN**

Appellants initially incorporate the above enumerated arguments. Additionally, in Appellants submit that Lakshman does not cure the deficiencies in Endo.

**5. REJECTION OF CLAIMS 6, 15 AND 21 UNDER 35 U.S.C. §103(a) OVER ENDO IN VIEW OF HARRIS**

Appellants initially incorporate the above enumerated arguments. Additionally, in Appellants submit that Harris does not cure the deficiencies in Endo.

**6. REJECTION OF CLAIM 8 UNDER 35 U.S.C. §103(a) OVER ENDO IN VIEW OF OLEJAR AND LAKSHMAN**

Appellants initially incorporate the above enumerated arguments. Additionally, in Appellants submit that Olejar and Lakshman do not cure the deficiencies in Endo.

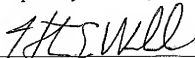
**7. REJECTION OF CLAIMS 9 UNDER 35 U.S.C. §103(a) OVER ENDO IN VIEW OF OLEJAR, LAKSHMAN AND HARRIS**

Appellants initially incorporate the above enumerated arguments. Additionally, in Appellants submit that Olejar, Lakshman, and Harris do not cure the deficiencies in Endo.

**CONCLUSION**

In summary, Appellants submit that claims 1-21 are allowable because Endo fails to teach each and every feature of the claimed invention and because the cited references, taken alone or in combination, fail to meet each of the three basic criteria required to establish a *prima facie* case of obviousness.

Respectfully submitted,



Hunter E. Webb

Reg. No.: 54,593

Date: March 25, 2005  
Hoffman, Warnick & D'Alessandro LLC  
75 State Street, 14<sup>th</sup> Floor  
Albany, New York 12207  
(518) 449-0044  
(518) 449-0047 (fax)

RAD/hew

## CLAIMS APPENDIX

### Claim Listing:

1. A method for routing data by a server, comprising the steps of:
  - providing an application on the server;
  - providing a table of formats and protocols on the server, wherein the table is accessible by the application, wherein the table contains a plurality of formats and protocols;
  - receiving, on the server, data to be routed from a source to a destination, the data having the destination and a transaction type that defines a character of the data included therein;
  - retrieving, from the table, a format of the plurality of formats for transforming the data and a protocol of the plurality of protocols for communicating the data based on the destination, the transaction type and the source; and
  - the application transforming the data into the retrieved format, and routing the transformed data to the destination using the retrieved communication protocol,
  - wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats.
2. The method of claim 1, provided table further includes sources, destinations and transaction types.
3. The method of claim 1, further comprising the step of identifying the source, prior to the retrieving step.
4. The method of claim 1, further comprising the step of the application detecting errors in the retrieved data based upon omissions in the data.
5. The method of claim 1, further comprising the step of tracking data communication between the source and the destination.
6. The method of claim 1, further comprising the step of generating a report based upon data communications and detected errors.
7. A method for routing data by a server, comprising the steps of:
  - providing a communication application on the server;
  - entering a table of formats, protocols, sources, destinations and transaction types on the server, wherein the table is accessible by the application, wherein the table contains a plurality of formats and protocols;
  - receiving, on the server, data to be routed from an identified source to a destination, the data having the destination and a transaction type that defines a character of the data included therein;
  - detecting errors in the data based upon omissions in the data;
  - retrieving from the table a format of the plurality of formats for transforming the data and a protocol of the plurality of protocols for communicating the data, based on the destination, the transaction type and the source; and

the application transforming the data into the retrieved format, and routing the transformed data from the server to the destination using the retrieved communication protocol, wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats.

8. The method of claim 7, further comprising the step of tracking data communication from the source to the destination.

9. The method of claim 8, further comprising the step of generating a report based upon data communications and detected errors.

10. A system for routing data by a server, comprising:

- a table system for providing a table having a plurality of formats and protocols;
- a data reception system for receiving data from a source to be routed to a destination, the data having a destination and a transaction type that defines a character of the data included therein;

- a retrieval system for retrieving a format of the plurality of formats for transforming the data and a protocol of the plurality of protocols for communicating the protocol from the table based upon the source, the destination and the transaction type;

- a transformation system for transforming the data into the retrieved format; and
- a routing system for routing the transformed data to the destination using the retrieved protocol,

wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats.

11. The system of claim 10, wherein the table further includes sources, destinations and transaction types.

12. The system of claim 10, wherein the data reception system further identifies the source.

13. The system of claim 10, further comprising an error detection system for detecting errors in the received data based upon omissions.

14. The system of claim 10, further comprising a tracking system for tracking data communication between the source and the destination.

15. The system of claim 10, further comprising a report system for of generating a report based upon data communications and detected errors.

16. A program product stored on a recordable medium for routing data by a server, which when executed, comprises:

- program code for providing a table having a plurality of formats and protocols;
- program code for receiving data from a source to be routed to a destination, the data having a destination and a transaction type that defines a character of the data included therein;

program code for retrieving a format of the plurality of formats for transforming the data and a protocol of the plurality of formats for communicating the protocol from the table based upon the source, the destination and the transaction type;

program code for transforming the data into the retrieved format; and  
program code for routing the transformed data to the destination using the retrieved protocol,

wherein the application is adapted to transform the data which is received in one of a plurality of formats into the transformed data which is in one of a plurality of formats.

17. The program product of claim 16, wherein the table further includes sources, destinations and transaction types.

18. The program product of claim 16, wherein the program code for receiving data further identifies the source.

19. The program product of claim 16, further comprising program code for detecting errors in the received data based upon omissions.

20. The program product of claim 16, further comprising program code for tracking data communication between the source and the destination.

21. The program product of claim 16, further comprising program code for generating a report based upon data communications and detected errors.

## EVIDENCE APPENDIX

No evidence is entered and relied upon in the appeal.

## **RELATED PROCEEDINGS APPENDIX**

No decisions rendered by a court or the Board in any proceeding are identified in the related appeals and interferences section.